

IN THE CLAIMS:

Please amend claims as follows:

1. (presently amended) An X-ray absorbing material comprising:

a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, wherein said filler material is a poly-dispersed mixture that has been segregated by intermixing and that contains metallic particles having a size between 10^{-9} and 10^{-3} m fixed in a textile base that serves as a matrix; and wherein the particles are bonded to the surface of and embedded in said textile base, and where the density of the X-ray absorbing material as a whole, given that the X-ray absorbing properties are equal to those of the material used for the particles of the X-ray absorbing filler, is defined by the relation:

$$\rho_m = (0.01 - 0.20)\rho_p,$$

where ρ_m is the density of the X-ray absorbing material as a whole, and

ρ_p is the density of the material used for the particles of the X-ray absorbing filler.

2. (presently amended) An X-ray absorbing material comprising:

a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, where said filler material is a poly-dispersed mixture that has been segregated by intermixing and that contains metallic particles having a size between 10^{-9} and 10^{-3} m, wherein said particles are surrounded by the volume of a matrix that is made of at least one compound that solidifies under atmospheric pressure, or made of a composition derived from a base of the same compound, and the total mass of the segregated, poly-dispersed mixture consisting of particles of the X-ray absorbing filler is defined by the relation:

$$M = (0.05 - 0.5) m,$$

where M is the total mass of the segregated poly-dispersed mixture consisting of the X-ray absorbing filler particles, and

m is the equivalent mass of the X-ray absorbing filler material equal in protective properties to mass M .

3. (presently amended) An X-ray absorbing material comprising:

a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, where said filler material is a poly-dispersed mixture containing metallic particles having a size between 10^{-9} and 10^{-3} m, wherein said particles are bonded to an intermediate substrate surrounded by the volume of the matrix formed of at least one compound that solidifies under pressure.

4. (presently amended) An X-ray absorbing material, as defined in claim 3, wherein:

a textile base is used as an intermediate substrate.

5. (presently amended) An X-ray absorbing material, as defined in claim 3, wherein:

a mineral fiber is used as an intermediate substrate.

6. (presently amended) An X-ray absorbing material comprising:

a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, where said filler material is a poly-dispersed mixture containing metallic particles having a size between 10^{-9} and 10^{-3} m, wherein said particles are bonded to an intermediate substrate surrounded by the volume of the matrix formed of a composition derived from at least one compound that solidifies under pressure.